

CLAIMS

What is claimed is:

1. A cassette for a printing apparatus including a pick-up lever having a pick-up roller at one end thereof to be movable in the cassette, wherein the cassette comprises:
 - a cassette body to load printing media therein to be picked up by the pick-up roller;
 - a printing medium arranging guide member installed to be movable in the cassette body and to arrange trailing edges of the printing media in a predetermined form; and
 - a guide plate provided in a side of the cassette body to be opposite to the printing medium arranging guide member to provide a predetermined frictional resistance for a leading edge of a printing medium to be picked up by the pick-up roller, and having a guide surface formed in a predetermined shape, wherein a constant distance between the guide plate and the pick-up roller is maintained along a moving trace of the pick-up lever.
2. The cassette of claim 1, wherein the guide surface comprises a curved surface having a predetermined curvature.
3. The cassette of claim 2, wherein a center of the predetermined curvature of the guide surface corresponds to a pivot center of the pick-up lever.
4. The cassette of claim 2, wherein the printing medium arranging guide member comprises a support surface having a curved surface corresponding to the curved surface of the guide surface.
5. The cassette of claim 3, wherein the printing medium arranging guide member comprises a support surface having a curved surface corresponding to the curved surface of the guide surface.
6. A cassette for a printing apparatus having a pickup roller, the cassette comprising:
 - a cassette body to load printing media therein to be picked up by the pick-up roller;

a guide member installed to be movable in the cassette body and to arrange trailing edges of the printing media; and

a guide plate provided in a side of the cassette body to be opposite to the guide member to provide a predetermined frictional resistance for leading edges of printing media to be picked up by the pick-up roller and comprising a guide surface having at least two contact angles in relation to the horizontal direction of the printing media.

7. The cassette of claim 6, wherein the guide surface comprises:

a first slope which forms a first angle with respect to the leading edges of the printing media loaded in the cassette body and contacting with the first slope, and

a second slope interconnecting the first slope and a bottom surface of the cassette body, wherein the second slope forms a second angle with respect to the leading edges of the printing media loaded in the cassette body and coming into contacting with the second slope.

8. The cassette of claim 7, wherein the first slope comprises a greater inclination than the second slope.

9. The cassette of claim 7, wherein a boundary between the first slope and the second slope is positioned at a height corresponding to approximately a half of a printing medium loading capacity of the cassette body.

10. The cassette of claim 6 further comprising a friction pad installed on one of the first and second slopes to provide the predetermined frictional resistance when the leading edges of the printing media contact with the friction pad.

11. The cassette of claim 10, wherein the friction pad is attached to the second slope which interconnects the bottom surface of the cassette body and the first slope, wherein the second slope comprises a smaller inclination than the first slope.

12. The cassette of claim 1, wherein the cassette body further comprises an engaging surface to support the guide plate, wherein the engaging surface is formed of a shape corresponding to a shape of the guide plate.

13. The cassette of claim 1, wherein the printing medium arranging guide member arranges the trailing edges of the printing media to correspond to a shape of the guide plate.
14. The cassette of claim 2, wherein the predetermined curvature of the guide surface is larger than a pivot radius of the pickup lever about a pivot axle.
15. The cassette of claim 1, wherein the guide plate is formed of a metallic material.
16. The cassette of claim 1, wherein a lower end of the guide plate is fixed to a bottom of the cassette body and an upper end of the guide plate is fixed to an upper end of the cassette body.
17. The cassette of claim 7, wherein the guide member comprises a printing medium support surface having a shape complementary to a shape of the guide surface.
18. The cassette of claim 17, wherein the printing medium support surface comprises first and second support surfaces corresponding to the first and second slopes of the guide surface, respectively.
19. The cassette of claim 6, wherein the leading edges of the papers contact with the guide surface, to be supported in the cassette body.
20. The cassette of claim 6, wherein the guide plate is formed of a metallic material.
21. The cassette of claim 6, wherein the trailing and leading edges of the printing media loaded in the cassette body are arranged and supported by the printing medium support surface and the guide surface, respectively.
22. The cassette of claim 6, wherein a distance between the pick up roller and the guide plate is constant during a positional change of the pick up roller.
23. The cassette of claim 11, wherein the friction pad is formed of a urethane material or a rubber material.

24. A cassette for a printing apparatus having a pickup roller and a pickup lever installed to be movable in the cassette, the cassette comprising:
- a cassette body to load papers therein to be picked up by the pickup roller;
 - a guide member installed to be movable in the cassette body and to arrange trailing edges of the printing media in a predetermined form; and
 - a guide plate provided in a side opposite of the guide member to provide a predetermined frictional resistance to leading edges of the printing media,
- wherein the guide member and the guide plate are of a non-linear shape to support the trailing edges and leading edges of the printing media, respectively and to maintain a constant distance between the pickup roller and the guide plate along a moving trace of the pickup lever.
25. The cassette of claim 24, further comprising a friction pad installed on the guide plate to provide the predetermined frictional resistance when the leading edges of the printing media contact with the friction pad.
26. The cassette of claim 24, wherein the guide plate is formed of a metallic material.
27. The cassette of claim 25, wherein the friction pad is formed of a urethane material or a rubber material.